

AMENDMENTS TO THE CLAIMS

IN THE CLAIMS

1. (Currently Amended) A method of treating, in wastewater purification, sludge containing organic matter, divalent iron and phosphorus, ~~wherein comprising:~~
~~treating the sludge that is treated is made to contain so that it contains~~ dissolved iron and phosphorus at a molar ratio Fe:P of above 1:1;
~~treating the sludge is treated at 0-100°C with an acid at a, wherein a pH of 1-5 is achieved for~~ dissolution of divalent iron and phosphorus from the sludge;
~~supplying the sludge is supplied with an oxidizer or mixture of oxidizers~~ selected from hydrogen peroxide and percompounds, whereby divalent iron is oxidized by Fenton's reaction to trivalent iron; and
(i) trivalent iron is precipitated as trivalent iron phosphate;
(ii) free radicals with a deodorisation and sanitation effect are formed by Fenton's reaction;
~~dewatering the sludge is then dewatered at a pH of at most 7; and~~
~~recirculating the aqueous solution obtained in dewatering is recirculated to the wastewater~~ purification.

2. (Original) A method as claimed in claim 1, wherein the sludge is acid treated with sulphuric acid, formic acid or oxalic acid.

3. (Original) A method as claimed in claim 1 or 2, wherein the sludge is acid treated for 10 min to 2 h.
4. (Original) A method as claimed in claim 1, wherein the sludge that is treated is made to contain iron and phosphorus at a molar ratio Fe:P from above 1:1 to 1.5:1.
5. (Original) A method as claimed in claim 1, wherein the sludge is supplied with additional divalent iron before the adding of an oxidizer.
6. (Currently Amended) A method as claimed in claim 1, wherein the oxidizer or mixture of oxidizers is selected from at least one of hydrogen peroxide, sodium percarbonate and peracetic acid.
7. (Original) A method as claimed in claim 1, wherein the oxidizer is hydrogen peroxide.
8. (Currently Amended) A method as claimed in claim 1, wherein the sludge is supplied with hydrogen peroxide as an oxidizer in an amount of 10-100 kg, ~~preferably 30-60 kg,~~ 100% hydrogen peroxide per tonne of dry solids.
9. (Original) A method as claimed in claim 1, wherein the sludge is supplied with a dewatering aid before dewatering.

10. (Original) A method as claimed in claim 1, wherein the sludge is predewatered with a centrifuge or a rotary screen.

11. (Original) A method as claimed in claim 1, wherein the sludge is finally dewatered with a centrifuge, screw press, chamber filter press or band filter press.

12. (Original) A method as claimed in claim 1, wherein the sludge is dewatered to a solids content of at least 30% by weight.

13. (Original) A method as claimed in claim 1, wherein the sludge is dewatered to a solids content of 35-60% by weight.

14. (New) The method according to claim 8, wherein the amount of hydrogen peroxide is 30-60 hg, 100% hydrogen peroxide per tonne of dry solids.